

In the Claims:

This Listing of the Claims replaces all previous Listings of the Claims.

Listing of the Claims:

1. (Currently Amended) A method for drilling a bore through a target including a ready made through bore, the method comprising:

advancing a drill bit into the target along the ready made through bore in a direction of advancement from a region where a drill device arranged to drive the drill bit is located to a further region;

injecting a directing gas through at least one aperture in the drill bit so that gas ejected therefrom is directed in the direction of advancement; and

as the bore is drilled, directing substantially all waste material along the ready made through bore in the direction of advancement via the gas to the further region.

2. (Previously Presented) The method as claimed in claim 1 wherein at least one cutting element of the drill bit defines an internal diameter of the bore developed in the target as the bit advances.

3. (Currently Amended) The method as claimed in claim 2 further comprising:

providing ~~[[a]]~~ the ready made bore having an existing diameter less than the internal diameter in the target; and

directing waste material along the ready made bore during the step of advancing the drill bit.

4. (Previously Presented) The method as claimed in claim 1 wherein substantially all of the waste material is directed in the direction of advancement.

5. (Previously Presented) The method as claimed in claim 1 comprising dry drilling.

6. (Previously Presented) The method as claimed in claim 1 further comprising simultaneously drilling through at least two different materials.

7. (Previously Presented) The method as claimed in claim 1 wherein the target comprises a wall composed of a first material and a pipe composed of a different material extending through the wall, the internal bore of the pipe defining a ready made bore along which the drill bit is advanced.

8. (Previously Presented) The method as claimed in claim 1 further comprising:

selecting the dimensions of the drill tip for providing consistent particle size, having a largest cross-section below a predetermined threshold limit, of ejected waste material.

9. (Currently Amended) A drill bit for drilling a bore through a target via a drilling process, comprising:

at least one cutting surface arranged to cut a bore having an internal diameter through the target as the drill bit advances into the target from a region where a drill device arranged to drive the drill bit is located to a further region; and

at least one aperture in the drill bit for permitting a directing gas to be injected in a direction of advancement of the drill bit to thereby direct substantially all waste material, formed as the bore is drilled, in the direction of advancement to the further region; wherein

the drill bit further comprises a drill tip including the cutting surface and a shaft portion for connecting the drill tip to a drill device and the at least one aperture is formed radially outwardly in the shaft portion.

10. (Previously Presented) The drill bit as claimed in claim 9 wherein the cutting surface is arranged for cutting a bore having an internal diameter wider than an existing bore in the target and along which the drill bit is advanced.

11. (Canceled).

12. (Previously Presented) The drill bit as claimed in claim 9 further comprising a pilot tip, having an outer diameter arranged to closely match an internal diameter of a ready made bore formed in the target, extending from a body portion of the drill bit.

13. (Previously Presented) The drill bit as claimed in claim 12 wherein the pilot tip is disposed at a forward end region of the body portion of the drill bit.

14. (Previously Presented) The drill bit as claimed in claim 9 further comprising at least one chip breaker tip disposed at a forward region of a body portion of the drill bit.

15. (Previously Presented) The drill bit as claimed in claim 9 further comprising:
at least one air passage extending longitudinally through the drill bit for providing a route for gas to flow along from a rear portion of the drill bit to the at least one aperture.

16. (Currently Amended) The drill bit as claimed in claim ~~[[11]]~~ 2 wherein the shaft portion comprises a cylindrical shell body portion and includes at least one further aperture therein, for providing a route for gas to flow from an internal region of the cylindrical shell to an external region formed between the outer diameter of the cylindrical shell and the inner diameter of the drilled bore.

17. (Currently Amended) The drill bit as claimed in claim [[11]] 9 further comprising:

connecting means on at least one of a rear portion of the drill tip and/or a forward region of the shaft portion for securably connecting the tip and shaft portion together.

18. (Currently Amended) A drill, for use with a drill bit arranged for drilling a bore through a target, comprising:

a drill bit comprising:

at least one cutting surface arranged to cut a bore having an internal diameter through the target as the drill bit advances into the target from a region where a drill device arranged to drive the drill bit is located to a further region; and

at least one aperture in the drill bit for permitting a directing gas to be injected in a direction of advancement of the drill bit to thereby direct substantially all waste material, formed as the bore is drilled, in the direction of advancement to the further region; wherein

the drill bit further comprises a drill tip including the cutting surface and a shaft portion for connecting the drill tip to a drill device and the at least one aperture is formed radially outwardly in the shaft portion;

a rotor shaft arranged to rotate when driven;

a motor arranged to drive the shaft;

connection means for connecting the drill bit to the rotor shaft;

a gas inlet arranged to receive pressurised gas from a pressurised gas source;

and

gas directing means arranged to inject gas from the inlet to the drill bit thereby providing a directing gas flow in a direction of advancement as the drill bit drills the bore.

19.- 20. (Canceled).

21. (New) The method of claim 1 wherein the waste material is substantially prevented from moving in a direction opposite the direction of advancement.

22. (New) The drill bit of claim 9 wherein the at least one aperture in the drill bit is configured to direct gas in the direction of advancement of the drill bit such that the waste material is substantially prevented from moving in a direction opposite the direction of advancement.

23. (New) The drill of claim 18 wherein the at least one aperture in the drill bit is configured to direct gas in the direction of advancement of the drill bit such that the waste material is substantially prevented from moving in a direction opposite the direction of advancement.